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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Claude Dreulle Maurice

0512-1099

2580

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7590

04/27/2007

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EXAMINER

WALKER, KEITH D

ART UNIT

PAPER NUMBER

1745

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/936,231

Applicant(s)

MAURICE ET AL.

Examiner

Keith Walker

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 and 23-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 and 23-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/25/07 has been entered.

Claims 23-34 are new and Claims 9-16 & 23-34 are pending examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 27 recites the limitation "the opposing wall elements" in line 1 on page 6.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 9-16 & 23-32 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 2,172,266 (Whitaker).

The reference citations are referring to column: lines, for instance the first page has columns 1 & 2, etc.

Whitaker teaches a stacked storage assembly with two parallel sidewalls having a folded edge that forms a floor support having an intervening air space between the walls such that the base area of a battery is exposed to the intervening air space (Figs. 1, 3 & 5; 3:60-75; 4:70-75; 5:40-55). Removable rods extend through the folded edges (Fig. 15) and the two end plates each have handling points, namely louvers (Fig. 11 & 12; 6:60-70). Each wall element is in the shape of a 'U' with the arms of the 'U' facing each other. The wall elements are spaced apart with the 'U' sections stacking directly on one another and lower arms of the wall elements form a support base. The two sidewalls are not contacting each other and the modules are interchangeable (Figs. 1, 2, 3; 3:70-75).

Regarding claims 9 & 31, sizing the floor to support particular batteries is product-by-process and as such even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113). Defining the type of batteries placed into the box only illustrates the use of the box. The manner in which the claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art satisfying the claimed structural

limitations (MPEP 2111.02). The type of battery disclosed in the claims does not provide patentably distinct structural characteristics over the prior art of Whitaker.

Regarding claims 23, 24 & 26, the limitations further define the batteries and since storing batteries is an intended use of the box, the limitations are not considered further limiting to the claimed product. These claims, while considered, are not further limiting to the structure of the claimed product.

Regarding claims 13 & 14, the ends of the box have doors with lugs acting as hinges and a lug to secure the door (Fig. 4 & 9; 5:40-55, 6:60-75).

2. Claims 9-11, 13-15 & 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by JP Publication 11-025947 (Eguro).

Eguro teaches a battery box comprising two sidewalls extending parallel and defining a housing. The sidewalls consist of an assembly of stacked modules comprising a pair of U shaped spacers mounted opposite each other. A floor support is formed by the opposing edges of the spacers and an intervening air space is located between the opposing U shaped spacers. The U shaped spacers stack directly on top of each other (Figs. 1 & 2; [0008-0012]). Each opposing wall element comprises one folded edge, defining a support for batteries. Locking protrusions on the box serve as retention means (Abstract). The box has two end plates provided with fixing lugs, openings in the end plates for ventilation and handling points for engagement by a lifting device (Fig. 2; [0011, 0017]). The U shaped spacers directly stack on each other.

Sizing the floor to support particular batteries is product-by-process and as such even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113). Defining the type of batteries placed into the box only illustrates the use of the box. The manner in which the claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art satisfying the claimed structural limitations (MPEP 2111.02). The type of battery disclosed in the claims does not provide patentably distinct structural characteristics over the prior art of Eguro.

Regarding claims 23, 24 & 26, the limitations further define the batteries and since storing batteries is an intended use of the box, the limitations are not considered further limiting to the claimed product. These claims, while considered, are not further limiting to the structure of the claimed product.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 33 & 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2,172,266 (Whitaker) in view of US Patent 6,189,635 (Schuler).

The teachings of Whitaker as discussed above are incorporated herein.

Whitaker is silent to a retaining rod extending through each wall element and located in each sidewall.

Schuler teaches a battery box for storing multiple stacked batteries. The retaining brackets each have an aperture through which a retaining rod to extends (Fig. 2, 3:35-50). The retaining rod keeps the stacked elements tied together firmly and provides a means to hold down the assembly.

Therefore it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the box assembly with the retaining rod of Schuler to provide a means to firmly hold down the assembly.

4. Claims 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP Publication 11-025947 (Eguro) in view of US Patent 5,304,434 (Stone).

Eguro teaches a box for housing batteries. The housing frame makes a pair of wall elements mounted opposite each other. The frame's lower arms form the support for the batteries and have an intervening air space between them (Fig. 2, Abstract, [0015-0017]).

Eguro is silent to stacking multiple housing frames.

Stone teaches stacking multiple modules to form a cell rack assembly. The stacked modules are interchangeable and are connected together with retaining bolts

(Fig. 4, Abstract, 3:55-65, 5:4-10). End plates, having ventilation slots, are placed on the edges of the assembly to increase the structural integrity of the box. Holes are provided in the end plate for removably attaching the end plates to the support member (Fig. 8, 7:30-40). Stacking the boxes of Eguro as taught by Stone would contact the upper arm of opposing wall elements with the lower arm of adjacent wall elements.

The motivation to use the stacking structure is to size the assembly with the appropriate number of cells for a particular load application. Furthermore, this stacking arrangement allows access to the individual cells for testing, service and maintenance (Abstract, 3:25-30).

Therefore it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the battery box of Eguro with the stacking structure of Stone to form an assembly of individual cells that meets the demand for a particular load and provide access to the individual cells for maintenance.

5. Claims 33 & 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP Publication 11-025947 (Eguro) and US Patent 5,304,434 (Stone) as applied to claim 29, and further in view of US Patent 6,189,635 (Schuler).

The teachings of Eguro and Stone as discussed above are incorporated herein.

Eguro and Stone are silent to a retaining rod extending through each wall element of a respective side.

Schuler teaches a battery box for storing multiple stacked batteries. The retaining brackets have an aperture for a retaining rod to extend through each of the retaining

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brackets (Fig. 2, 3:35-50). The retaining rod keeps the stacked elements tied together firmly and provides a means to hold down the assembly.

Therefore it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the box assembly of Eguro and Stone with the retaining rod of Schuler to provide a means to firmly hold down the assembly.

Furthermore, having a single rod allows for a quicker change of the individual modules by only needing to remove one bolt per side.

6. Claims 9-11, 16, 23 & 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,056,677 (Toyosawa).

Toyosawa teaches a box with retention means, for holding different articles. The box has a pair of horizontally opposed parallel wall elements with a folded edge to form a floor support (Figs. 1a, 1b, 4a, 4b; 3:40-4:55).

While Toyosawa is silent to stacking the box holders, it would be obvious to one skilled in the art to stack multiple boxes to allow for storing multiple items together, such as batteries.

Sizing the floor to support particular batteries is product-by-process and as such even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113). Defining

the type of batteries placed into the box only illustrates the use of the box. The manner in which the claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art satisfying the claimed structural limitations (MPEP 2111.02). The type of battery disclosed in the claims does not provide patentably distinct structural characteristics over the prior art of Eguro.

Regarding claims 23, 24 & 26, the limitations further define the batteries and since storing batteries is an intended use of the box, the limitations are not considered further limiting to the claimed product. These claims, while considered, are not further limiting to the structure of the claimed product.

7. Claims 9-16, 23, 24 & 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2,916,161 (Schaefer) in view of US Patent 5,444,123 (Beckley)

Regarding claims 9, 10 & 16, Schaefer describes a stackable unit comprising a plurality of boxes having two sidewalls extending parallel. The pair of horizontally opposed wall elements each has at least one folded edge, forming a floor support (Fig. 1).

Regarding claims 11 & 12, the floor of each box and the removable posts extending through the folded edges constitute a battery retention means (2:33-37, Fig. 1).

Regarding claim 13, each of the end plates has a pair of fixing lugs (Fig. 1).

Regarding claims 14 & 15, the assembly has openings at the top of each bin and the lip of each bin provides a handling point (Fig. 1).

Schaefer does not teach a space between the walls such that a base area of the battery is unsupported and exposed.

Beckley teaches providing the housing with vent holes (Fig. 7, 9:15-20). The holes allow the air to circulate around the battery allowing the batteries to operate at a cooler temperature.

Therefore it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the plurality of stacked boxes with the vent holes of Beckley so the base of the batteries have a means of ventilation so as to keep the batteries operating efficiently.

Sizing the floor to support particular batteries is product-by-process and as such even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113). Defining the type of batteries placed into the box only illustrates the use of the box. The manner in which the claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art satisfying the claimed structural limitations (MPEP 2111.02). The type of battery disclosed in the claims does not provide patentably distinct structural characteristics over the prior art of Eguro.

Regarding claims 23, 24 & 26, the limitations further define the batteries and since storing batteries is an intended use of the box, the limitations are not considered further

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limiting to the claimed product. These claims, while considered, are not further limiting to the structure of the claimed product.

8. Claims 9-16, 23, 24 & 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 2,916,161 (Schaefer) in view of US Patent 6,326,103 (Ido).

The teachings of Schaefer as discussed above are incorporated herein.

Schaefer is silent to a space between the walls such that a base area of the battery is unsupported and exposed.

Ido teaches a housing with holes in the bottom for ventilation (Fig. 2, 7:30-40, 9:42-50). The holes allow air to circulate up from the bottom and remove the heat of the batteries out the top of the housing. This circulation keeps an appropriate operating temperature balance within all the batteries.

Therefore it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the boxes of Schaefer with the ventilation holes of Ido to keep the batteries operating at a cooler and more constant temperature.

Sizing the floor to support particular batteries is product-by-process and as such even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113). Defining the type of batteries placed into the box only illustrates the use of the box. The manner in

which the claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art satisfying the claimed structural limitations (MPEP 2111.02). The type of battery disclosed in the claims does not provide patentably distinct structural characteristics over the prior art of Eguro.

Regarding claims 23, 24 & 26, the limitations further define the batteries and since storing batteries is an intended use of the box, the limitations are not considered further limiting to the claimed product. These claims, while considered, are not further limiting to the structure of the claimed product.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 1/25/07 have been fully considered but they are not persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues the references do not teach particular elements of the claims; however, Applicant fails to point out the particular elements allegedly missing from the references. Applicant only restates the claim limitations and then argues the limitations are not disclosed in the prior art references disclosed above. As discussed in the

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rejections above, the prior art references do teach all of the elements of the instant claims as referenced in the rejections.

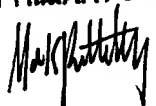
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Walker whose telephone number is 571-272-3458. The examiner can normally be reached on Mon. - Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

K. Walker

MARK RUTHKOSKY
PRIMARY EXAMINER
 4.27.07